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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,709	04/01/2002	Dirk Pophusen	Mo-7058:LeA 34,016	2725

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EXAMINER

HAMPTON HIGHTOWER, PATRICIA

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 06/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/089,709

Applicant(s)

POPHUSEN ET AL.

Examiner

Patricia Hightower

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 7-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 7-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Information Disclosure Statement

The information disclosure statement filed April 01, 2002 has been considered and has been made of record.

Response to Amendment

The preliminary amendment filed April 01, 2002 in which claims 3-6 were canceled is acknowledged; claims 1-2 and 7-18 are presently pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-2 and 7-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "**relevant** moulding composition" in claims 1-2 is a relative term which renders the claim indefinite. The term "**relevant** moulding composition" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Clarification is requested.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2,7-9,11 and 13-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Onishi et al (USP 5,674,952).

Onishi et al (USP 5,674,952) discloses a resin composition utilized in a blow molding process to produced a hollow molded product that stably form a long parison and having a three -dimensionally curved shape by the formation of a copolyamide having a melting point of 225°C or more and a crystallization temperature of 230°C or less obtained by a polymerization of PA 66, PA 6T and PA 6I components at a specific compounding ratio, forming a melt polymer from said composition and applying shear to said melt polymer, the melting point (T_m) and crystallization (T_c) of the crystalline polyamide varying greatly depending on the shear rate applied to said melt polymer and satisfying formulae (I) and (II);

$$2,000,000 \geq \mu a_{10} \geq 2,000 \quad (I)$$

$$\mu a_{10}/\mu a_{1000} \geq 3.3 \quad (II)$$

wherein T_m is melting point of said polyamide, μa_{10} is melt viscosity at a temperature of T_m+20°C and a shear rate of 10 (1/sec) (poise), μa_{1000} is the melt viscosity at a temperature of T_m+20°C and a shear rate of 1000 (1/sec)(poise) ; and forming a parison from said melt polymer and blow molding the parison to form said molded product; which anticipates the claimed invention. See abstract; Table 1; the claims; col. 1, lines 8-12,31-36,64-67; col. 2, lines 1-3,6-23,28-33,36-39,40-67; cols. 3-4; col. 4, lines 62- col. 5, lines 1-14; col. 5, lines 15-37, 40-46,52-58, 59-67; col. 9, lines 20-31; the examples.

Onishi et al (USP 5,674,952) teaches at col. 5, lines 38-58, 59-67, the copolyamide alone, as well as various types of polyamide compounds prepared from said copolyamide and additives such as fibrous reinforcing material, elastomer, flame retarder, heat-resisting agent, antioxidant or flame retarder assistant may be applied to equations (I) and (II). The addition of the fibrous reinforcing material used is able to obtain a rigidity and a high thermal deformation temperature in the raw material polyamide compound. Moreover, in addition to a fibrous reinforcing material, inorganic fillers such as ... carbon black and zinc powder may be added.

Claims 1-2 and 7-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Sayed et al (USP 5,605,945).

Sayed et al (USP 5,605,945) discloses glass-fiber reinforced polyamide molding compounds with increased viscosities and favorable thermal and mechanical properties during compounding and a mixture of A) 79 to 47% by weight of a thermoplastic partly crystalline polyamide, B) 0 to 50% by weight of reinforcing materials, C) 0.1 to 4% by weight of diepoxide, D) 0.1 to 2% by weight of processing additives (i.e., lubricants, heat stabilizers, nucleating agents and colorants) which anticipates the claimed invention. See col. 2, lines 8-56; abstract; col. 1; the claims; abstract; the examples.

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These references are cited to show the state of the art of polyamide capped with epoxy groups utilized as molding compositions and the resulting molded products; Cuzin, Dykes, Suenaga and Schoenberg.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia Hightower whose telephone number is (703) 308-2434. The examiner can normally be reached on Monday – Friday from 9:30 a.m. - 6:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (703) 308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

P. Hightower:dh
June 02, 2003

P. Hightower
Patricia Hightower
Examiner
Art Unit 1711